

Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554

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FEDERAL COMMUNICATIONS COMMISSION  
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In the Matter of

Revision of the Commission's Rules to  
Ensure Compatibility With Enhanced 911  
Calling Systems

CC Docket No. 94-102

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**COMMENTS**

Constellation Communications, Inc. ("Constellation"), by counsel, hereby comments on the Commission's proposal in the Notice of Proposed Rulemaking ("NPRM") in the above-captioned proceeding to require wireless services, to include features that will make enhanced 911 services available to mobile radio callers.

Constellation is pending applicant to construct a low-earth orbit ("LEO") satellite system to be operated in the 1610-1626.5 MHz and 2483.-2500 MHz frequency bands.<sup>1</sup> This system is designed to provide voice services via satellite to customers throughout the world. In the NPRM, the Commission seeks comments on whether mobile satellite services should be subject to requirements for enhanced 911 comparability.<sup>2</sup>

As the Commission is well aware, mobile satellite services at 1.6/2.4 GHz bands is currently in the planning stages. There are presently six applications, including Constellation's, pending before the Commission. Each of these applicants has proposed to provide continuous voice telephony services to the entire United States as well as most populated areas throughout the world. Since these systems are presently in the

<sup>1</sup> See Constellation Communications, Inc., File Nos. 17-DSS-P-1(48) and CSS 91-013.

<sup>2</sup> See NPRM at para. 38 and n.40.

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developmental stage, the technical and business parameters of actual system operations has not been confirmed. This includes costs and pricing, service requirements, and system operational characteristics. It is for this reason that Constellation believes that it would be premature to impose 911 compatibility requirements on LEO MSS systems. Given the current dynamic state of LEO MSS, to require 911 comparability now may delay the introduction of this new technology by adding significant complexities to the system architecture and increase the cost of the service to customers in areas where there is no basic communications services. It would be more prudent to allow the evolutionary development of LEO MSS over time in a manner similar to terrestrial cellular technology. Knowledge gained from operational cellular systems lead to the extension of 911 service capabilities from the wireless network to terrestrial wireless technologies.

Additionally, it should be noted that the home service area of a LEO MSS subscriber will be the entire United States. Internally derived position location accuracy is likely to be measured in kilometers within a beam area measured in terms of hundreds of thousands of square kilometers. It will therefore be difficult for a satellite service provider to determine the proper public safety answering point ("PSAP") for routing a 911 call. As a practical matter, such calls are likely to be routed over the Public Switched Telephone Network ("PSTN") since economics would prevent MSS service providers from establishing a nationwide private line network to connect its gateway earth stations with each PSAP. Including GPS accuracy position determination will add significant costs to the price of a subscriber terminal and will inhibit the early growth of the LEO MSS service.

In sum, the Commission should defer imposing any 911 service requirements of LEO MSS systems until these systems are further developed and the impact of the Commission's proposals can be better assessed. Thus, the proposed schedule proposed in paragraphs 49-

51 of the NPRM is too ambitious for LEO MSS. Constellation believes the Commission should first focus on terrestrial wireless services and limit the scope of this docket to terrestrial technologies. At a later date after experience is gained with terrestrial wireless systems, and the 911 service capabilities of LEO MSS are determined, the Commission will be in a better position to assess the opportunities and limitations associated with the provision of 911 services by LEO MSS systems.

CONCLUSION

For the above-stated reasons, Constellation urges the Commission not to impose a 911 compatibility requirement on LEO MSS systems.

Respectfully submitted,



Robert A. Mazer  
Rosenman & Colin  
Suite 200, 1300 19th Street, N.W.  
Washington, D.C. 20036  
(202) 463-4640  
Counsel to Constellation  
Communications, Inc.

Dated: January 9, 1995